## THE STATUS OF PENNANT'S "MEXICAN DEER"

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## [Plate 4]

In a brief paper in 1902,¹ I attempted to show that Gmelin's name Cervus mexicanus, based on Pennant's Mexican Deer, should be used for the white-tailed deer of the Valley of Mexico. My belief that the name should be regarded as identifiable was based on giving primary importance to Pennant's description and figure of an actual specimen, while Dr. J. A. Allen,² who proposed discarding the name as unidentifiable, gave preference to Pennant's first citation, the Teuthlalmaçame of Hernandez. Since there is still no uniformity of usage in regard to the name and especially since I am now able to present a photograph of Pennant's specimen, it seems advisable to restate and amplify my former contention.

In 1771, Pennant,<sup>3</sup> under the vernacular name Mexican Deer, published the following description:

D. [eer] with strong thick rugged horns, bending forward; ten inches long; nine between point and point; trifurcated in the upper part; one erect snag about two inches above the base: by accident subject to vary in the number of branches: head large: neck thick: eyes large, and bright: about the size of the *European* Roe: color of the hair reddish; when young spotted with white.

Inhabits Mexico, Guiana, and Brazil; not only the internal parts of the country, but even the borders of the plantations: the flesh inferior to that of European venison. A species very distinct from the Roe of the old continent.

This description was accompanied by a woodcut of a frontlet and pair of antlers showing the characters mentioned and making it perfectly obvious that both description and figure were taken from an actual specimen examined by the describer. There were in addition, as customary, a number of citations of earlier authors including those which Pennant supposed to be based upon the same species of deer as the one he himself had described.

In dealing with names based solely upon citations, it has been the practice to regard one as the primary reference, this usually but not always being the first one, and if this proves satisfactorily identifiable, slight discrepancies in the remaining ones have been disregarded. A

<sup>&</sup>lt;sup>1</sup> Proc. Biol. Soc. Washington, 15, pp. 87–88, Apr. 25, 1902.

<sup>&</sup>lt;sup>2</sup> Bull. Am. Mus. Nat. Hist., 16, p. 16, footnote, Feb. 1, 1902.

<sup>&</sup>lt;sup>3</sup> Synopsis of Quadrupeds, p. 54, pl. 9, fig. 3.

specimen, however, always takes precedence over a citation, unless the description is so drawn from both as to involve a mixture of contradictory or impossible characters. In Pennant's description, there is no incompatible statement<sup>4</sup> and it seems clear that the primary basis of names later applied to it is unquestionably the specimen. This specimen is still in existence in the British Museum where I personally examined it a number of years ago in company with Mr. Oldfield Thomas and Mr. Richard Lydekker who brought it to my attention. At that time I secured the photographs of it reproduced herewith. Its agreement with the figure published by Pennant and with a subsequent one by Hamilton Smith<sup>5</sup> is not absolute in every detail but furnishes such a close approximation as to leave no doubt of its identity. This then is in effect the type specimen and the principal basis of the technical name Cervus mexicanus which was first used by Zimmermann in 1777 and later by Gmelin in 1788. It was adopted, principally from Gmelin, by later authors, almost without question, down to 1902 when Allen discarded it as unidentifiable.

The abnormality of the type specimen is of a very common sort among various forms of the white-tailed deer and consists in an increased number of points and unusually heavy beams. The specimen, therefore, is not unidentifiable except in the narrowest sense. As a member of the "virginianus" series of American deer, that is, the white-tailed deer, its identity is unquestionable and, if the name be taken from Zimmermann, as now seems necessary, it is earlier than any other except virginianus, to which it yields only page priority.

In the absence of proof to the contrary, it seems necessary to accept Pennant's belief that the specimen came from Mexico. Hence the name must be applied to some form of white-tailed deer from that country. The first use of the name in connection with specimens from a definite locality was that of Lichtenstein in 1827, his specimens being from the Valley of Mexico. Therefore, I proposed in 1902 that this locality be regarded as restrictively used by Lichtenstein. In effect, I designated a type locality, Lichtenstein merely furnished the

<sup>&</sup>lt;sup>4</sup> If anything was derived from Hernandez, it was doubtless from the text of that author, which, as noted by Lydekker (Deer of All Lands, p. 263, 1898), applies exclusively to a deer, only the figure being composite.

<sup>&</sup>lt;sup>5</sup> In both figures the antlers are curiously reversed, the right being in the position of the left.

suggestion.<sup>6</sup> This designation, however, is subject to revision if the type proves to belong to a larger form than the one of the Valley of Mexico. Without direct comparison of specimens, it is unsafe to draw definite conclusions, but it seems very probable that the type will prove inseparable from similarly developed specimens of one of the larger, more northern forms, as the Texan or possibly the Louisianan deer, either of which could come under a broad interpretation of "Mexcan." This is a matter for decision by the future monographer of the entire group of white-tailed deer. The following measurements were taken from the type: Length of beam over curve, 570 mm.; circumference above burr, 165 mm.; distance between anterior points,  $8\frac{3}{4}$ -9 inches.

Important citations connected with the history of the names are as follows:

## Odocoileus mexicanus Zimmermann

Mexican Deer Pennant, Synopsis Quad., p. 54, pl. 9, fig. 3, 1771; Hist. Quad. 1, p. 110, pl. fig. 3, 1781—type in British Museum.

Cervus (vel potius) Capreolus mexicanus, ZIMMERMANN, Spec. Zool. Geogr. Quad., p. 533, 1777—based on Pennant.

Cervus mexicanus Gmelin, Syst. Nat., 1, p. 179, 1788—based on Pennant; Desmarest, Mamm., 2, p. 444, 1822—"cette espèce, qui n'est encore comme que par ses bois extrèmement rugueux;" Lichtenstein, Darst. neuer Säugeth., p. 18 and text, 1827—Gmelin's name adopted for specimens from Valley of Mexico; Ham. Smith, Griffith's Cuv., Anim. Kingd., 4, p. 130, pl. opp. p. 94, fig. 3, 1827—Pennant's type refigured.

Cariacus mexicanus Lesson, Nouv. Tabl. Anim., Mamm., p. 173, 1842; Gray, Cat. Rumin. Mamm. Brit. Mus. p. 83, 1872—under C. leucurus, where it is stated "The horns figured by Pennant are in the British Museum, and were refigured by Hamilton Smith;" Brooke, Proc. Zool. Soc. Lond. p. 919, 1878—horns figured by Pennant regarded as probably those of "Cariacus macrotis;" Alston, Biol. Cent. Amer., p. 113, footnote, 1879—"It seems to me more probable that these antlers belonged to C. leucurus (Dougl.) which recent American zoologists consider to be a local race of C. virginianus; they much resemble the remarkable Nebraska head figured by Baird (Mamm. N. Am. p. 652, fig. 18)."

Cariacus virginianus mexicanus Rhoads, Am. Nat., 28, p. 524, 1894. Mazama americana mexicana Lydekker, Deer of All Lands, p. 261, 1898.

<sup>&</sup>lt;sup>6</sup> It was not intended as some have supposed, that the name should date from Lichtenstein. Compare Allen, Bull. Amer. Mus. Nat. Hist., 16, p. 161, July 1, 1902; Miller, Bull. 79, U. S. Nat. Mus., p. 389, 1912; Lydekker, Catal. Ungul. Brit. Mus., 4, p. 165, 1915.

- Dama lichtensteini Allen, Bull. Amer. Mus. Nat. Hist., 16, p. 20, Feb. 1, 1902— Cervus mexicanus of Lichtenstein renamed.
- Odocoileus mexicanus Osgood, Proc. Biol. Soc. Wash., 15, p. 88, Apr. 25, 1902; Miller and Rehn, Proc. Bost. Soc. Nat. Hist., 31, p. 16, Aug., 1903; Miller, Bull. 79, U. S. Nat. Mus., p. 389, 1912.
- Odocoileus virginianus Lydekker, Catal. Ungul. Brit. Mus., 4, p. 165, 1915—Pennant's type listed as No. 681, e.